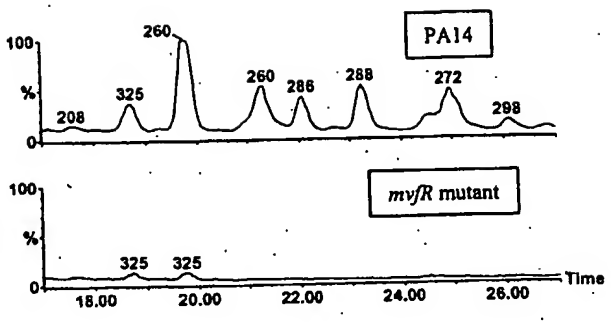
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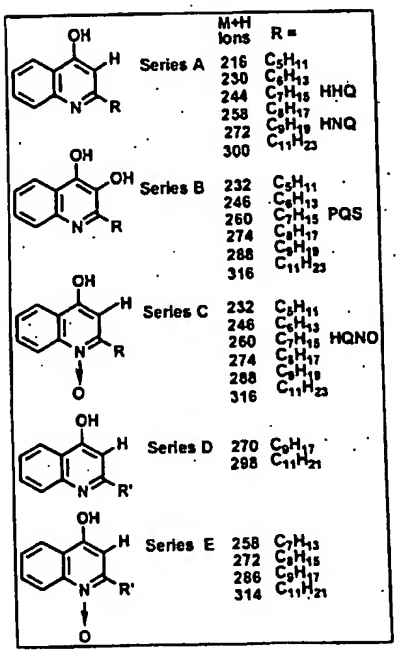
24.00
26.00

Fig. 1.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300 $C_{11}H_{23}$
Series B
232 C_5H_{11}
246 C_6H_{13}
260 C_7H_{15} PQS
274 C_8H_{17}
288 C_9H_{19}
316 $C_{11}H_{23}$
Series C
232 C_5H_{11}
246 C_6H_{13}
260 C_7H_{15} HQNO
274 C_8H_{17}
288 C_9H_{19}
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Series D
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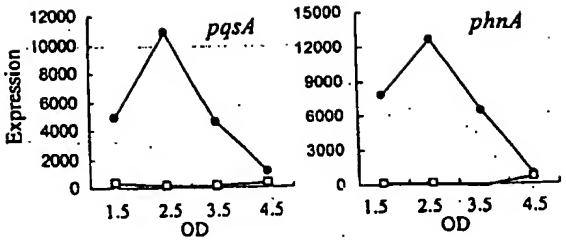
Fig. 2.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4.5
OD

Fig. 3

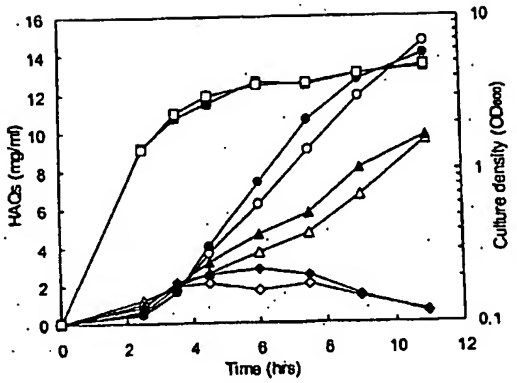
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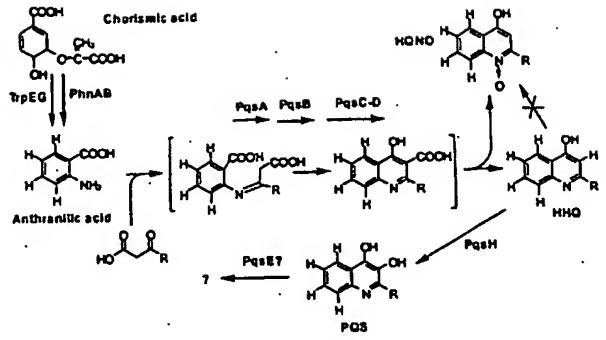
Fig. 4.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PhnAB
Anthranilic acid
PqsA
PqsB
PqsC-D
HQNO
HHQ
PqsH
PqsE?
PQS

Fig. 5.

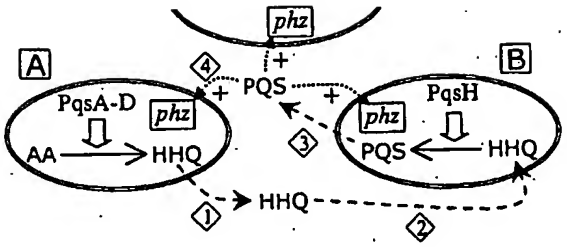


Fig. 6.

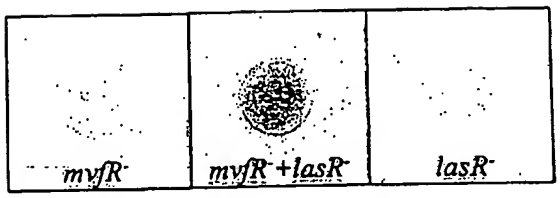
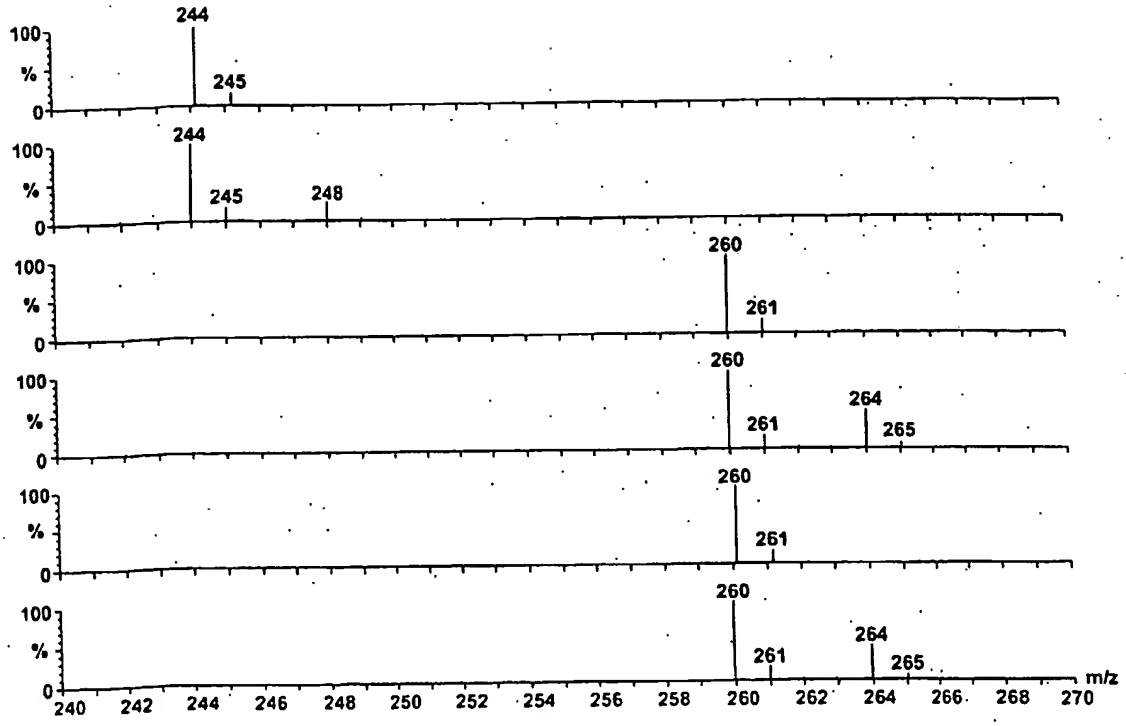


Fig. 7.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m/z

Fig. 8.

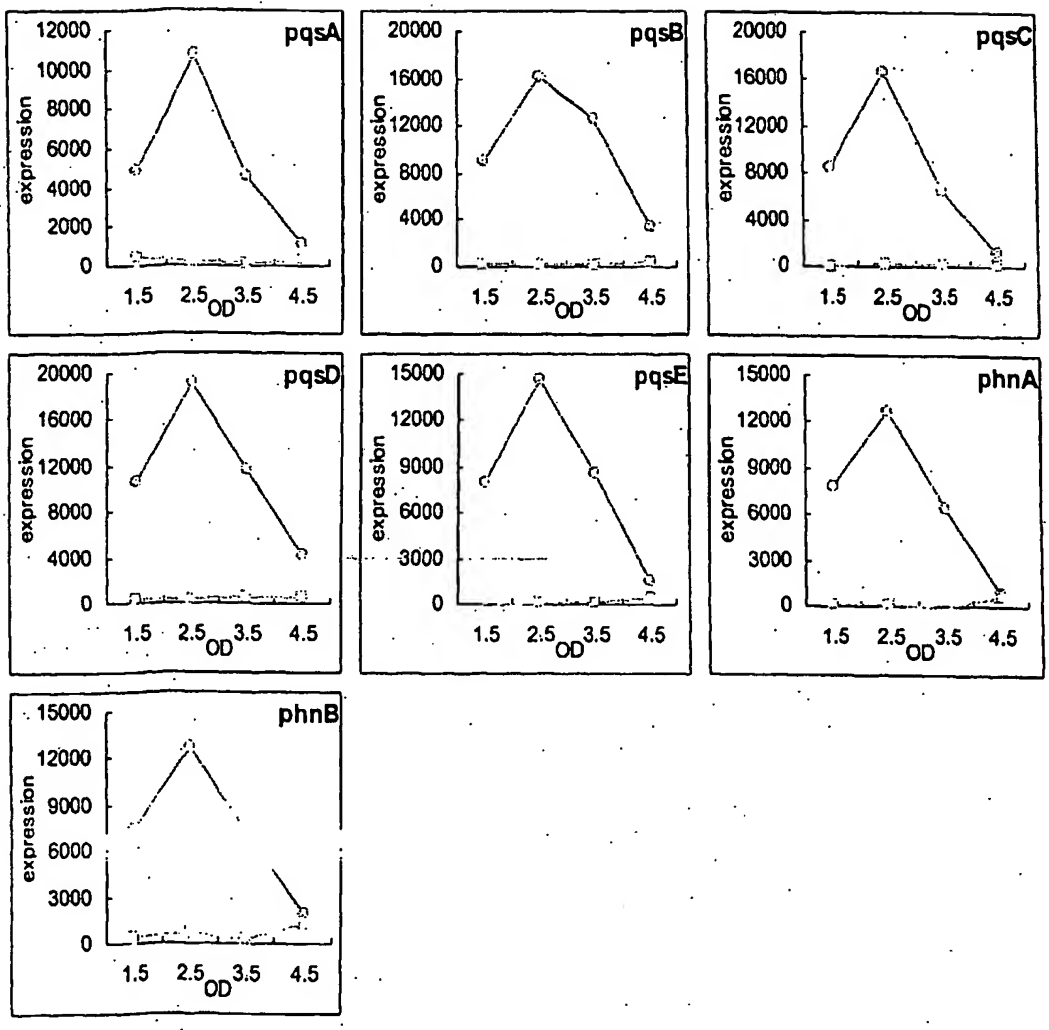

Fig. 9.

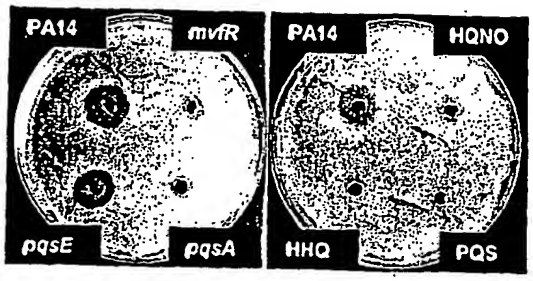

Fig. 10.

All sequences are from *Pseudomonas aeruginosa*

***pqsA* (SEQ ID NO:1)**

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Figure 11

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Figure 11
page 3 of 5

PqsD (SEQ ID NO:11)

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PqsE (SEQ ID NO:12)

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PqsH (SEQ ID NO:13)

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***pqsA-E* operon promoter (including ATG start site of *pqsA*) (SEQ ID NO:15)**

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Figure 11

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AAGGTGCTCTTCGTGGAAAACTTCGACGACATGCTGCGTCTGGTGGAAGCCGGCGTCGGATGGGGCATCGC
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GCGGCATCGACACCAAGGTGTATTGCTACTACAACACCGCGCTGGAATCCGAGCGCAGCTTCCTGCGCTTT
CTCGAAAGCGCCCGCCAGCGCCTGCGCGAACTCGGCCGCCAGCGTTTCGACGATGCGCCGGCCTGGCAACC
GAGCATCGTCGAAACGGCGCAGCGCCGCTCAGGCCCGAAGGCGCTCGCGTACCGCCAGCGCGCCGCACCAG
AGTAG

MvfR ((SEQ ID NO:17)

MPIHNLNHVNMFLQVIASGSISSAARILRKSHTAVSSAVSNLEIDLCVELVRRDGYKVEPTEQALRLIPYM
RSLLNYQQLIGDIAFNLNKGPRNLRVLLDTAIPPSFCDTVSSVLLDDFNMVSLIRTSPADSLATIKQDNAE
IDIAITIDEELKISRFNQCVLGYTKAFVVAHPQHPLCNASLHSIASLANYRQISLGSRSGQHSNLLRPVSD
KVLFVENFDDMLRLVEAGVGWGIAPHYFVEERLRNGTLAVLSELYEPGGIDTKVYCYYNTALESERSFLRF
LESARQRLRELGRQRFDDAPAWQPSIVETAQRRSGPKALAYRQRAAPE

Figure 11
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(% of PA14)	*mvfR*	*phnAB*	*pqsA*	*pqsB*	*pqsE*	*mvfR* compl.	*lasR*
HHQ	0	48 ± 5	0	0	49 ± 4	1017 ± 247	250 ± 11
HHQ *N*-oxide	0	110 ± 17	0	0	148 ± 29	200 ± 41	45 ± 8
PQS	0	76 ± 11	0	0	90 ± 13	247 ± 65	23 ± 3
HNQ	0	68 ± 5	0	0	84 ± 5	502 ± 106	551 ± 262
HNQ *N*-oxide	0	91 ± 15	0	0	135 ± 20	286 ± 52	41 ± 3
diHNQ	0	128 ± 21	0	0	160 ± 27	156 ± 49	19 ± 3
AA	0	90 ± 51	458 ± 221	188 ± 102	24 ± 17	0	6 ± 1
Pyocyanin	<10	24 ± 3	<10	<10	<10	177 ± 26	NT

FIGURE 12

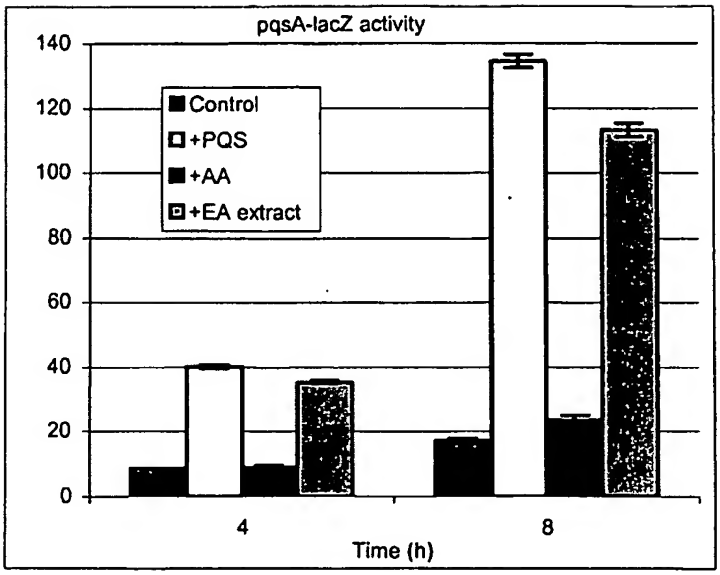
FIGURE 13

	PQS (μg/ml)	β-gal activity (MU) †
lasR⁻	2.1 ± 0.1	63.6 ± 2.6
lasR⁻ + *mvfR*⁻	5.2 ± 1.8	110.5 ± 4.3
Ratio*	5.0 ± 1.8	3.5 ± 0.2

FIGURE 14

	β-gal activity (MU)[†]	
	PA14	*lasR*⁻[†]
-HHQ	371 ± 8	78.7 ± 1.5
+HHQ	473 ± 23	83.7 ± 0.2

FIGURE 15


pqsA-lacZ activity
140
120
100
80
60
40
20
0
Control
+PQS
+AA
+EA extract
4
8
Time (h)

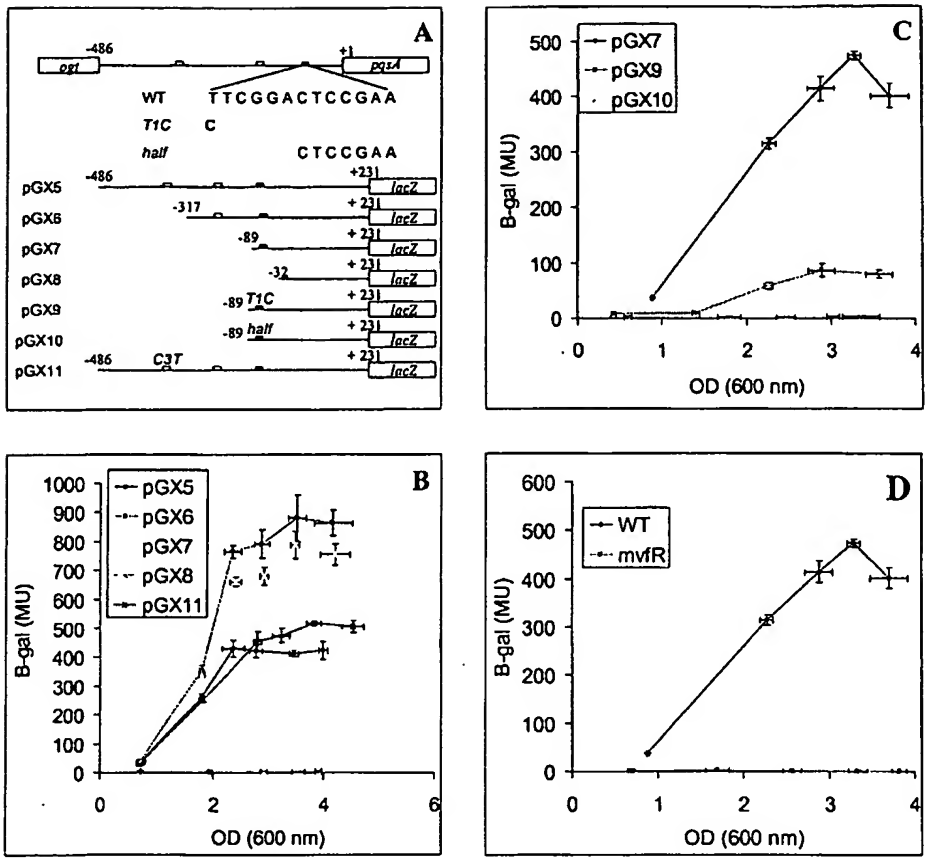

A
-486
+1
pqsA
WT TTCGGACTCCGAA
T1C C
half CTCCGAA
pGX5
pGX6
pGX7
pGX8
pGX9
pGX10
pGX11
lacZ
C3T
B
pGX5
pGX6
pGX7
pGX8
pGX11
B-gal (MU)
OD (600 nm)
C
pGX7
pGX9
pGX10
B-gal (MU)
OD (600 nm)
D
WT
mvfR
B-gal (MU)
OD (600 nm)

Figure 16